

# WISPA

www.wispa.org

Friday, January 30, 2004

In the matter of NPRM 03-201

Dear Sirs,

WISPA is a coalition of WISPs (Wireless Internet Service Providers) in the process of forming the only industry owned trade organization.

First, we'd like to commend the Commission on a very well thought out series of questions. This NPRM demonstrates a level of market understanding that we rarely see from groups that are not down in the trenches with us.

On the item of amps, we believe that amps should be available as individual components and should be allowed to be "mix and match" replaced. We don't want to hire a tower crew for a \$500 to \$1000 tower job, replace an additional \$500 to \$1000 in amps, cables, and antennas just because of a radio failure or upgrade. We do understand the OOB emissions and harmful interference concerns though. To this end we suggest that amps, and possibly radios as well) be held to a high enough standard during the certification process that the likelihood of an amp EVER passing harmful OOB emissions would be slim or non existent. We'd like to point out the tunable amps from <http://www.rflinx.com>. They allow the user to set the center channel and claim 50dB attenuation to adjacent channels. It seems to us that a similar requirement for all amps would likely eliminate the potential for harmful OOB emissions.

On the unique connector rule. We're split and were unable to come to a majority vote on the issue. The two sides of the issue were A: There are so many adapters readily available that the intent of the rule is easily and often bypassed. B: Having the rule in place helps to keep the general public from doing things that may harm our system reliability or functionality.

The issue of using Point to Point (PTP) rules for Point to Multi-Point (PTMP) systems is one that we support in general. We do think that the playing field needs to be leveled in regards to the Navini and Vivato certifications. We think that there needs to be some kind of limit on the total output though. 42 dB would allow us to double our current cell sizes so it seems to us that this would be a good place to start. We also agreed that any system with an output over 36dB should have to have a horizontal coverage zone of no more than 120\*. Perhaps the specific power level can be readdressed in a couple of years, after we have some empirical data as to it's effect on the market place. We are also

concerned what higher power levels for such systems will likely do to the overall noise floor, primarily in urban markets. We suggest that higher power levels should perhaps be allowed only in rural areas, where it is truly needed. We were not, however, able to come up with a good definition of rural from an RF perspective. A couple of ideas were to use a set distance from a given population. IE: 30 miles from a town of 100,000 or more. Another idea was to use census data for the county serviced.

We were also in agreement that the 902 MHz to 928 MHz band should be allowed to use the new rules whatever they may be.

The Professional Installer clause in the rules needs to be clarified or eliminated. Perhaps allowing a Professional Installer to mix and match components or design systems of any combination of devices that will not give harmful interference would work. And maintain the certified systems rule for products sold through normal retail channels (CompUSA, PC Connection, Office Max, etc).

Lastly we'd like to suggest that there is a critical need in the market place for sub 1 GHz spectrum. We propose that all sub 1 GHz spectrum be opened up on an unlicensed non interference basis. We also suggest that the power levels allowed in these bands be sufficient to allow long distance PTMP systems even in heavily treed markets. We keep hearing talk about how much of the 700 MHz band is unused in MOST rural markets. Since there is licensed 700 MHz gear out there we believe it should be fairly inexpensive to develop unlicensed gear for this band AND that greater product volumes will help lower the costs of the licensed gear due to likely similarities.